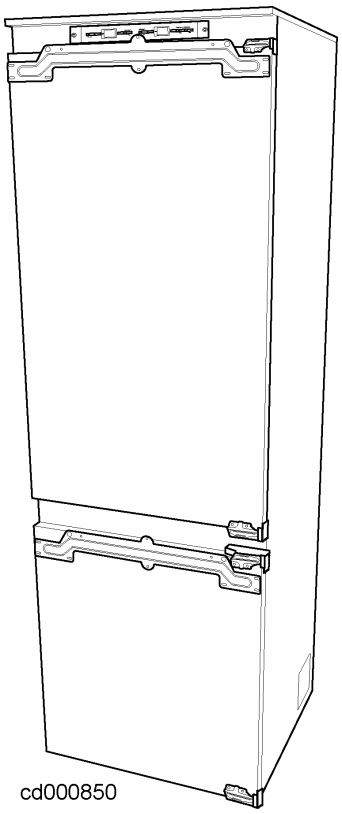
Electrolux
Technical Support Europe

SERVICE MANUAL

REFRIGERATOR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Door on Door

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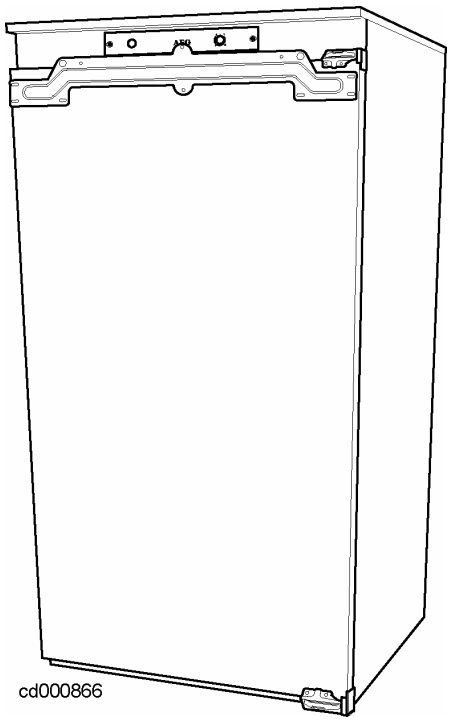
1. Presentation

In this manual are described the new models of built-in door on door refrigerators that will be produced in the factories of Susegana, Florence and Kassel (Germany).

This new range of refrigerators has the following main characteristics:

- new cabinet width: 556mm against 540mm of the sliding door model;
- new door on door installation system;
- low-noise compressor;
- accurate styling;
- availability of the models in electromechanical and electronic version (apart from 1780 bicompressor)
- control panel on the top of the appliance.

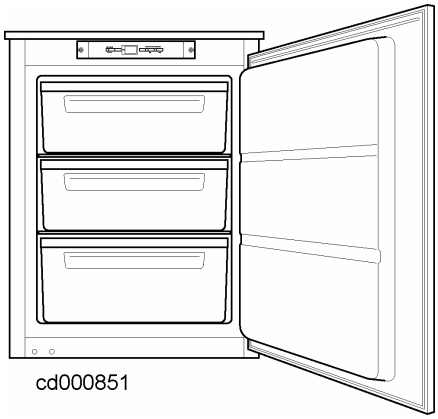


The principal markets are: Germany, Austria, Holland, Belgium, Swisse, Great Britain.
The principal trademarks are: AEG, JUNO, ELECTROLUX, PRIVILEG.

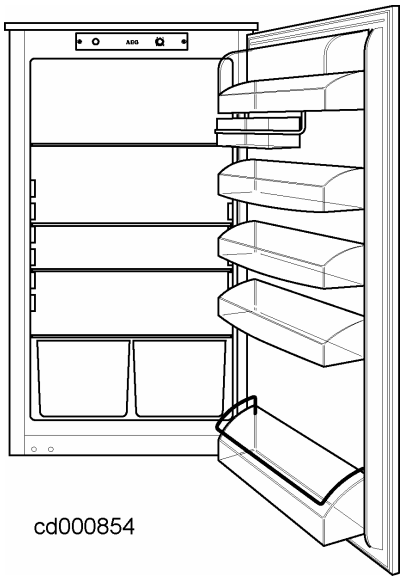
The Door on Door range presents both the electronic and mechanical control system version for every model, except for the bicompressor that it is available only in electronic version.

The models are:

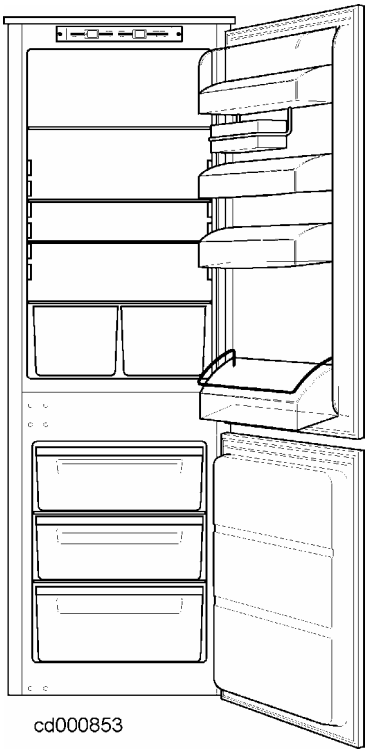
PNC	BASE MODEL	TYPE	CAPACITY [litres]	CONTROL
922 692 . . .	80 FREEZER BI DOD	FREEZER	76	ELECTRONIC
922 692 . . .	80 FREEZER BI DOD	FREEZER	76	MECHANICAL
922 752 . . .	110 FREEZER BI DOD	FREEZER	109	ELECTRONIC
922 752 . . .	110 FREEZER BI DOD	FREEZER	109	MECHANICAL
923 415 . . .	160 COOLER BI DOD	COOLER	157	ELECTRONIC
923 415 . . .	160 COOLER BI DOD	COOLER	157	MECHANICAL
923 415 . . .	190 COOLER BI DOD	COOLER	187	ELECTRONIC
923 415 . . .	190 COOLER BI DOD	COOLER	187	MECHANICAL
923 415 . . .	230 COOLER BI DOD	COOLER	227	ELECTRONIC
923 415 . . .	230 COOLER BI DOD	COOLER	227	MECHANICAL
923 415 . . .	145 ***/**** BI DOD	3/4 STARS	143	ELECTRONIC
923 415 . . .	145 ***/**** BI DOD	3/4 STARS	143	MECHANICAL
923 415 . . .	175 ***/**** BI DOD	3/4 STARS	173	ELECTRONIC
923 415 . . .	175 ***/**** BI DOD	3/4 STARS	173	MECHANICAL
923 415 . . .	215 ***/**** BI DOD	3/4 STARS	215	ELECTRONIC
923 415 . . .	215 ***/**** BI DOD	3/4 STARS	215	MECHANICAL
925 700 . . .	290 COMBI 2-C BI DOD	BICOMPRESSOR	209 + 76	ELECTRONIC



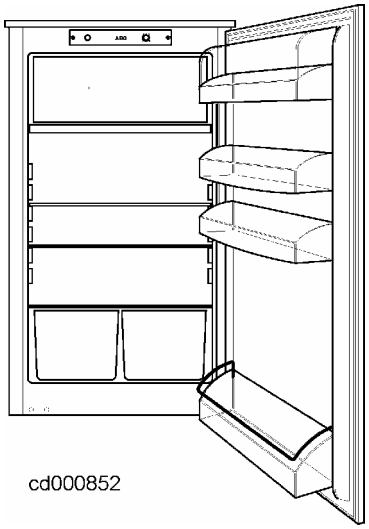
Freezer



Refrigerator



Combined bicompressor

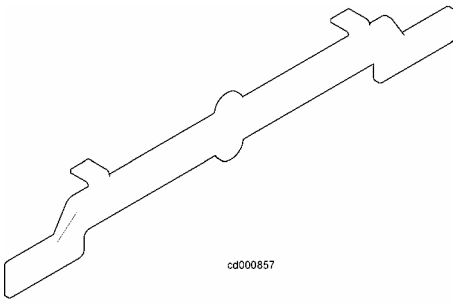


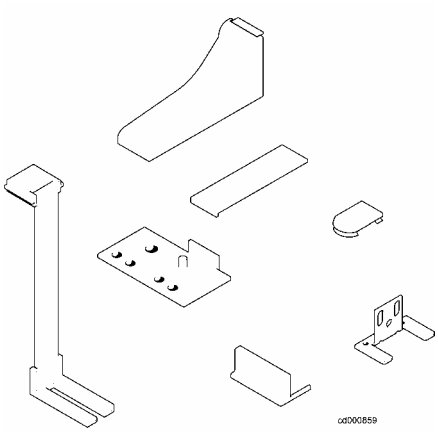
3/4 STAR

1.1 New Door on Door Installation System

The characteristics of the new Door on Door installation system are:

- easy installing
- fast installing
- no measurement
- applicability to every cabinet



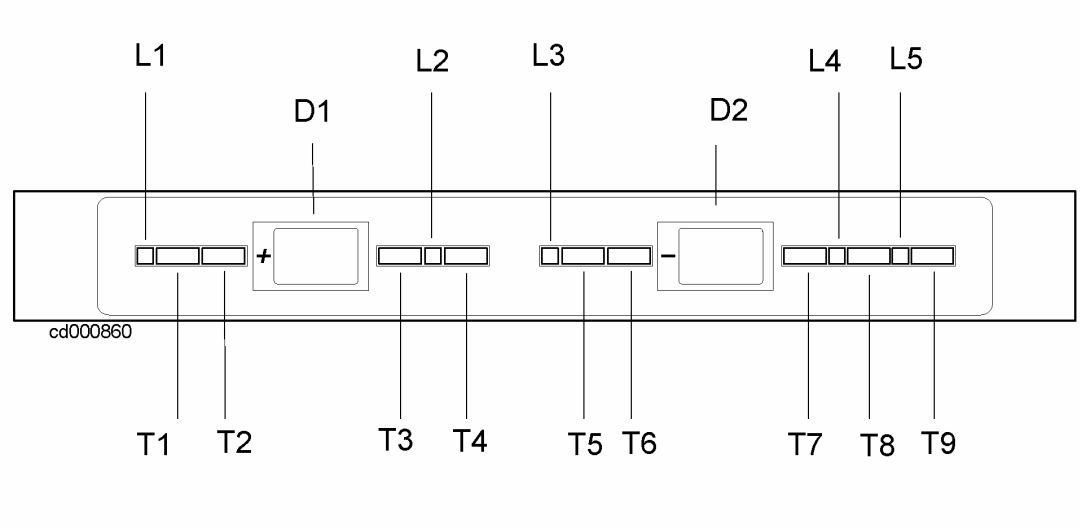


The installation operations are described in the user manual.

2. Control Functions

The combined bicompressor refrigerator is available only in the electronic version.

2.1 Combined Bicompressor



Buttons	Led	Display
T1= ON/OFF refrigerator	L1= ON/OFF refrigerator	D1= refrigerator
T2= refrigerator temperature increase	L2= coolmatic function	D2= freezer
T3= refrigerator temperature decrease	L3= ON/OFF freezer	
T4= coolmatic function	L4= frostmatic function	
T5= ON/OFF freezer	L5= alarm	
T6= freezer temperature increase		
T7= freezer temperature decrease		
T8= frostmatic function		
T9= alarm reset		

2.1.1 Start and Switch-off of the Appliance

To start a compartment you need to press the ON/OFF button, T1 for the refrigerator and T5 for the freezer. It starts immediately.
To switch off the compartment you need to press the ON/OFF button for 1 second. The display will show 3, 2, 1 and then it switches off.

2.1.2 Regulation of the Freezer Temperature

To change the set temperature in the freezer you need to press the T6 button (increase) or T7 (decrease). It is possible to set the temperature from –15°C till –24°C.
Once you have pressed T6 or T7 button, the display flashes for 5 seconds showing the set temperature.The display then will indicate a steady temperature which has been detected inside the freezer.
The start and the switch-off of the compressor of the freezer compartment are regulated by the evaporator.

2.1.3 Fast-freezing Function

By pressing T8 button the fast-freezing function activates and it powers the compressor continuously for 54 hours. To deactivate the function earlier than 54 hours, just press T8 button again.
The L4 led lights till the freezing function is activated.

2.1.4 Temperature Alarm

The alarm is activated when the temperature reaches –8°C: L5 led and the display flash and the buzzer sounds. You can switch off the alarm by pressing the T9 button, and when the buzzer has stopped, the display shows the max. reached temperature for 5 seconds and L5 led continues to flash. Only when the temperature goes below –8°C also the L5 led will turn off.
If the alarm condition stops automatically without pressing T9 button, the buzzer stops to sound but L5 led and the display will flash. By pressing T9, L5 led stops to flash, while the display will show the max. reached temperature for 5 seconds.

2.1.5 Regulation of the Refrigerator Temperature

To change the set temperature in the refrigerator you need to press T2 button (increase) or T3 (decrease). It is possible to set temperature from +2°C till +8°C.
Once you have pressed T2 or T3 button, the display will flash for 5 seconds showing the set temperature. The display then will indicate a steady temperature which has been detected inside the freezer.

2.1.6 Refrigerator Holiday Function (only in cooler and bicompressor)

The max. temperature you can set in the refrigerator compartment reaches +8°C; by pressing T2 button once again after having reached +8°C the symbol “H” on the display will indicate that the holiday function is activated. With this function the refrigerator temperature is maintained at +15°C.
This temperature doesn’t allow to conserve food, but it’s very useful when you don’t use the refrigerator compartment as it avoids the formation of unpleasant smells.
To deactivate the function you need to set another temperature so that the “H” symbol disappears from the display.

2.1.7 Refrigerator Control

The compressor is activated when both the evaporator and air sensor detect the cut-in temperature and is turned off when the temperature detected by the air sensor reaches the cut-out temperature.
With low room temperatures the rest time of the compressor can be extremely long, therefore the control sytem sets a max. deactivation time of 6 hours.
With high room temperatures the compressor can activate after a long time or even work continuously if the thermostatic regulation is not adapt; therefore the control system sets a max. activation time of 18 hours.
Only for four star compartment: by low room temperatures a balance heater is activated automatically through an electronic board provided with a sensor.

2.1.8 Fast-freezing Function in the Refrigerator (COOLMATIC)

The fast-freezing function activates by pressing T4 button and the refrigerator temperature is set automatically at +2°C. The function deactivates automatically after 6 hours or by pressing T4 button.
The yellow L2 led lights as to indicate that the function is activated.

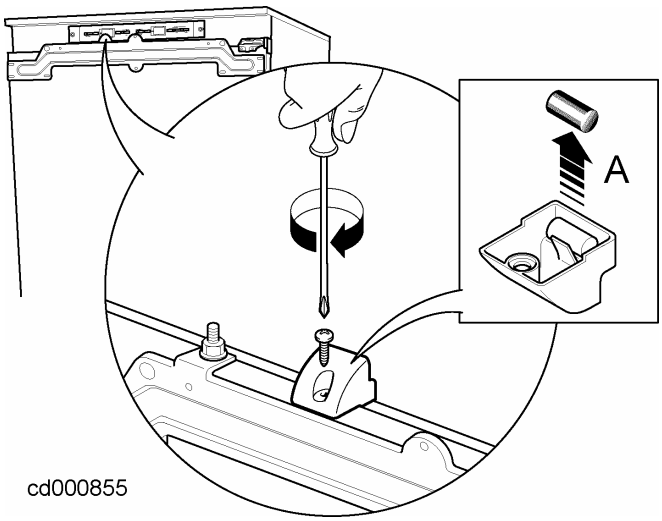
2.1.9 Demo Mode

By pressing at the same time the decrease temperature button and ON/OFF one for 5 seconds the demo function activates. The inside machine temperature must be above +10°C so that the function can activate. The display board is active, the light turns on when you open the door, but the compressor is switched off.

2.1.10 Open Door Alarm

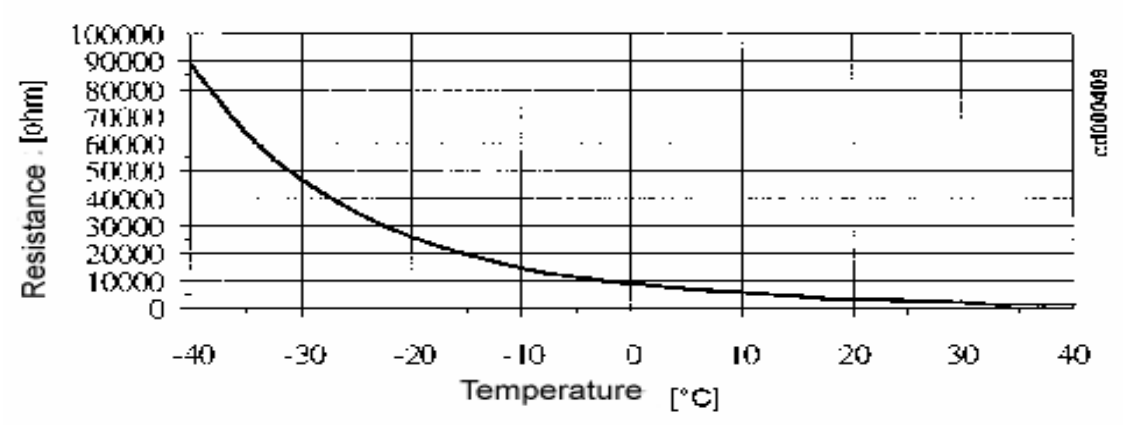
The open door alarm is activated through a sensor (reed-element) located on the display board which identifies the presence of a little magnet on the refrigerator door. As the picture shows, the magnet is replaceable.
Alarm will turn on:

- after 80 seconds for the freezer door
- after 5 minutes for the refrigerator door (alarm will not be implemented on all models)



3. NTC Sensors Failure

The NTC sensors have the following temperature-resistance characteristic:



Abnormal resistance values will be interpreted as sensor failure and the display will show a signal.

If a sensor is defective, the related compressor will be on for about 30 minutes and off for about 45 minutes.

All NTC sensors are foamed and therefore cannot be replaced.

In case of sensors failure:

Refrigerator (defective air sensor): the lower part of the thermometer will show the symbol

Refrigerator (defective evaporator sensor): the higher part of the thermometer will show the symbol

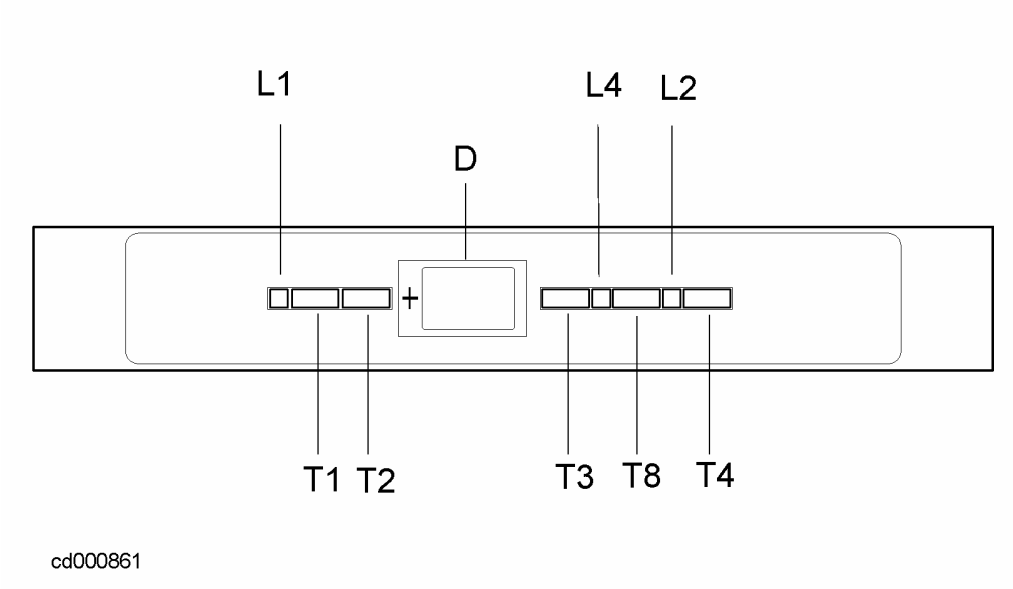
Freezer (defective sensor freezer): the lower part of the thermometer will show the symbol

At extreme temperatures, alarm levels can be activated even if the sensors are intact. You don't have to consider the failure codes at temperatures above + 39°C and below - 35°C.

Conversion table for NTC sensors :

°C	△	OHM
10	±0.6	5348
9	±0.6	5611
8	±0.6	5888
7	±0.6	6182
6	±0.6	6491
5	±0.4	6818
4	±0.4	7164
3	±0.4	7529
2	±0.4	7916
1	±0.4	8325
0	±0.4	8758
-1	±0.4	9216
-2	±0.4	9701
-3	±0.4	10215
-4	±0.4	10759
-5	±0.4	11337
-6	±0.6	11949
-7	±0.6	12598
-8	±0.6	13288
-9	±0.6	14019
-10	±0.6	14795
-11	±0.7	15620
-12	±0.7	16497
-13	±0.7	17429
-14	±0.7	18420
-15	±0.7	19475
-16	±0.8	20596
-17	±0.8	21791
-18	±0.8	23063
-19	±0.8	24418
-20	±0.8	25862
-21	±0.9	27402
-22	±0.9	29045
-23	±0.9	30797
-24	±0.9	32668
-25	±0.9	34666
-26	±1	36800
-27	±1	39082
-28	±1	41521
-29	±1	44131
-30	±1	46921
-31	±1	49910
-32	±1	53111
-33	±1	56541
-34	±1	60218
-35	±1	64161
-36	±1	68393
-37	±1	72932
-38	±1	77808
-39	±1	83046
-40	±1	88577

4. Four Star Compartment



Buttons	Led
T1= ON/OFF	L1= ON/OFF
T2= temperature increase	L2= coolmatic function
T3= temperature decrease	L4= frostmatic function
T4= coolmatic function	
T8= frostmatic function	

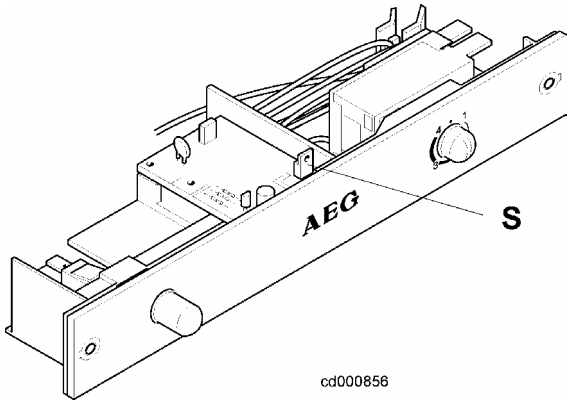
The description of the functions, buttons and leds is the same as the one of the combined bicompressors. The only difference is the fast-freezing function and the introduction of a balance heater with automatic connection.

4.1 Fast-freezing function in the four star compartment

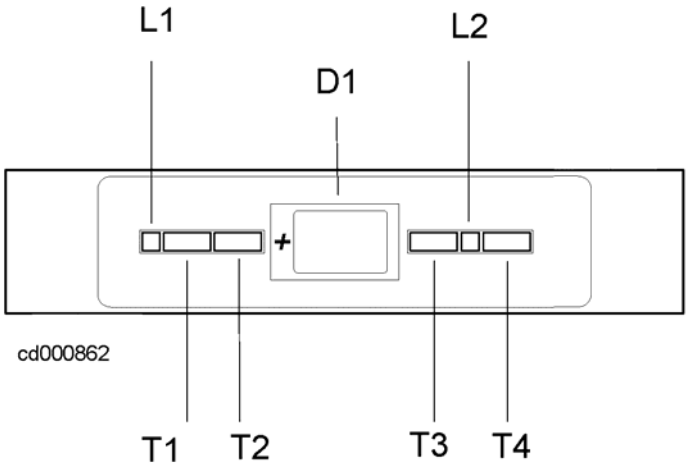
The function activates by pressing T8 button, the jellow L4 led turns on.
With this function, temperature is automatically set at +3°C for 48 hours.
If you wish to deactivate the function earlier than 48 hours, just press T8 button again.

4.2 Balance heater with automatic connection (3/4 STAR)

The three/four star model is provided with a balance heater that connects automatically when NTC sensor (**S**) put on the electronic module detects a room temperature above +20°C

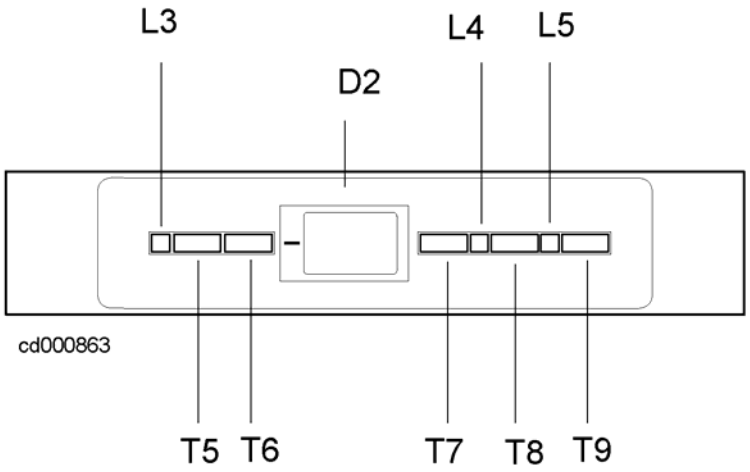


5. Refrigeratore



The description of the functions, buttons and leds is the same as the one of the combined bicompressors.

6. Freezer



The description of the functions, buttons and leds is the same as the one of the combined bicompressors.

7. SYMBOLS OF THE DISPLAY

Refrigerator

"0" – "39" steady light:	Displays the average temperature in the refrigerator
"2" – "8" flashing light:	Displayed during temperature setting. Disappears 5 seconds after temperature setting is complete
"0" steady light:	Displayed if the temperature in the refrigerator is below 0°C
"H" steady light:	Displays the Holiday function
steady light:	Air sensor failure
steady light:	Air sensor failure

Freezer

"+39" – "-35" steady light:	Displays the highest temperature in the freezer
"-15" – "-24" flashing light:	Displayed during the temperature setting. It disappears 5 seconds after temperature setting is complete
"+39" – "-35" flashing light:	Displayed when the temperature in the freezer has been above -8°C and has returned to a lower value
"+39" – "-8" steady light:	Displays the highest temperature in the cabinet after a power failure (showed for 5 seconds while pressing the reset button. The warning light turns off simultaneously)
steady light:	Sensor failure in the freezer

8. Accessibility